Moral Hazard under Zero Price Policy: Evidence from Japanese Long-term Care Claims Data*

Rong Fu[1] Haruko Noguchi[2]

What if out-of-pocket price is reduced to zero in long-term care insurance (LTCI) market? This study documents the presence and magnitude of moral hazard in Japan's LTCI market using 120-month claim records covering the entire market. The subsample is extracted as-good-as random by applying propensity score matching method. The results show 0.98 million yen higher lifetime cost of LTCI with respect to a reduction in co-payment rate from 10% to 0. Morally motivated insureds require a broader range of services, and have longer days of utilization than others do. In addition, that the magnitude of moral hazard in LTCI is larger than what studies observed in health insurance markets is confirmed, which could be explained by increased predictability of care needs, combination of unfavorable health and cautiousness of insureds, and the highly price-sensitive measurement for moral hazard. Furthermore, moral hazard correlates positively with ex-ante health risks. The positive correlation indicates a larger moral hazard in public LTCI than what is observed in private LTCI, since mandatory enrollment may enlarge the ex-ante risks. Emphasis is placed on regulations that guide insureds toward efficient service utilizations. Policies reducing ex-ante health related risks, such as preventative health care programs in young and middle-aged generations, would also effectively restrict moral hazard.

---

*This study is financially supported by several funds; the Waseda University Research Initiatives entitled "Empirical and theoretical research for social welfare in sustainable society- Inheritance of human capital beyond 'an individual' and 'a generation'"- (PI: Haruko Noguchi); Grant-in-Aid for Scientific Research Project funded by the Ministry of Health, Labour and Welfare: "Effects of the prevention policy of lifestyle related disease on labor productivity and macro economy from viewpoint of cost-effective analysis" (PI: Haruko Noguchi); and Grant-in-Aid for Scientific Research(C) by Japan Society for the Promotion of Science: "Change and disparity of accessibility to long-term care services: An Evidence from Japanese big data analyses" (PI: Akira Kawamura). This research project has received official approval to use the secondary data from the Statistics and Information Department of the MHLW. The study has also benefited from comments received at the 2017 iHEA congress at Boston University.

[1] Corresponding Author. Faculty of Political Science and Economics, Waseda University, 1-6-1 Nishi-Waseda, Shinjuku-ku, Tokyo 169-8050, Japan, +81 (0)70-1066-0150, +81 (3)5272-4782 (e-mail: natalifu1988@aoni.waseda.jp)

[2] Faculty of Political Science and Economics, Waseda University, 1-6-1 Nishi-Waseda, Shinjuku-ku, Tokyo 169-8050, Japan, +81 (3)5272-4782 (e-mail: h.noguchi@waseda.jp)